

A
Sub B
pin to protect the component in order to divert an electrostatic discharge, the device comprising at least one Zener diode connected to the contact pin to be directly polarized.

12. (New) Device according to claim 11, further comprising plural Zener diodes mounted in series and connected to the contact pin to be directly polarized.

13. (New) Device according to claim 11, wherein the at least one Zener diode comprises two regions strongly doped with opposite conductivity types, the two regions being separated by a region doped to an average level according to either of the conductivity types.

14. (New) Device according to claim 13, wherein the semiconducting layer of the substrate is a silicon layer, the doping of the two regions with strong doping being of the order of 10^{20} atoms/cm³, the doping of the region with medium level doping being of the order of 10^{18} atoms/cm³.

15. (New) Device according to claim 11, wherein the said substrate is an SOI substrate.

16. (New) Device according to claim 12, wherein the plural the Zener diodes are laid out adjacent to each other to form a series installation, an electrical link between two adjacent Zener diodes being obtained by a metallization.

17. (New) Device according to claim 12, wherein the plural Zener diodes are laid out adjacent to each other to form a series installation, an electrical link between two adjacent Zener diodes being obtained by a silicide.

W
18. (New) Method for making a device for protection of an electronic component against electrostatic discharges, the protection device comprising at least one Zener diode made in a semiconducting layer of a substrate, the semiconducting layer covering an insulating layer, the method comprising:

Handwritten mark

a step to define a zone of the diode or an active zone, in the semiconducting layer,
a step to implant a first zone in the active zone, to obtain the first zone with medium doping according to a conductivity type chosen between a first conductivity type and a second conductivity type opposite to the first conductivity type,
a step to implant a part of the first zone, to obtain a second strongly doped zone according to the first conductivity type, the second zone being separated from an unimplanted part of the active zone by a remaining part of the first zone, and
a step to implant the unimplanted part of the active zone to obtain a third zone with strong doping according to the said second conductivity type.

19. (New) Method for making a device for the protection of an electronic component against electrostatic discharges, the protection device comprising at least one Zener diode made in a semiconducting layer of a substrate, the semiconducting layer covering an insulating layer, the method comprising:

a step to define a zone of the diode or an active zone in the semiconducting layer,
a step to implant a first zone near a central part of the active zone, to obtain a first medium doped zone according to a conductivity type chosen between a first conductivity type and a second conductivity type opposite to the first conductivity type,
a step to form a grid made of a conducting material on the first zone, after formation of a thin grid oxide layer,
a step to implant a second zone of the active zone adjacent to the first zone, to obtain a second zone with strong doping according to the first conductivity type,